

# Dairy Glossary

**AI** – short for **artificial insemination**.

**Acute** - Used to describe disease where symptoms are readily evident. Treatment is generally required.

**Afterbirth** - the placental membranes expelled shortly after the calf is born.

**Antibiotic Residues** - The presence of traces of antibiotics in milk or meat. Milk must be withheld from the **bulk tank** while it contains antibiotic residues.

**Artificial insemination** – Sperm is collected from the bull, diluted and stored frozen until use. After thawing it is manually placed in the cow's uterus.

**Automatic cluster removal (ACR)** - A device for sensing the end of milk flow in the milking machine which shuts off the milking vacuum and removes the cluster from the cow's udder.

**Backing Gate** - A motorized or manual gate at the end of the collecting yard that may be moved forward to guide cows toward the entrance to the milking parlour.

**Bactoscan** - a measurement of the number of bacteria present in milk (usually expressed as e.g. 20, meaning 20,000 colony forming units /ml)

**Bedding** - Material used to absorb moisture and provide cushion. It should provide a clean, dry surface and reduce the incidence of mastitis. Possible bedding materials include: straw, sawdust, wood chips, sand, ground limestone, shredded newspaper, bark.

**Biosecurity** - Any of a broad range of practices enforced at a dairy farm to prevent transmittal of pathogens from other sources by feed, cattle, people, or other animals.

**Blind Quarter** - A quarter of an udder that does not secrete milk.

**Bovine** - Refers to cattle.

**Brisket Board** - A raised part of the cubicle bed at the front of the stall to keep cows positioned properly while lying. Usually made of wood or plastic, but occasionally concrete.

**Bull** - A sexually mature, uncastrated bovine male.

**Bulling** – The period of time (usually 12 to 24 hours) when the cow is in **oestrus** (heat).

**Bulk Tank** - A refrigerated, stainless steel vessel in which milk is cooled quickly to 2 to 4°C (35 - 39°F) and stored until collected by a milk tanker for transfer to the dairy.

**Cake** – colloquial term for concentrate feed for cows.

**Calf** - A young male or female bovine, usually up to the age of 12 weeks in a dairy system.

**Calving** - the birth of a calf

**Calving interval** – the interval (in days) from one calving to the next. The ideal is considered to be 365 days but this is difficult to achieve.

**Chronic** - Used to describe recurring symptoms or disease.

**Clinical** - Symptoms are present, supportive therapy or treatment is necessary.

**Colostrum** - First milk that a cow produces following calving. High in fat, protein, and immunoglobulins that may be directly absorbed by the newborn calf in its first 24 hours of life.

**Concentrates** - High energy or high protein feeds consisting primarily of the seed of the plant, but without stems and leaves.

**Conception** - the beginning of pregnancy.

**Conformation** - The body form or physical traits of an animal or parts of the animal in the case of udder conformation.

**Contagious** - Disease that can be passed from one cow to another through a number of possible ways.

**Cow** - A mature female bovine. Usually referring to any dairy females that have borne a calf. Some may consider females having given birth only once as "first-calf heifers" until they have a second calf.

**Cubicles** - Raised beds that the cows are free to enter or leave at will. The concrete base is covered with a mattress or bedding material. Referred to freestalls in the US. Also referred to as **cubicle housing**.

**Cull** - To remove a cow from the herd. Reasons for culling include voluntary culling of cows for low milk production, or involuntary culling of cows for reasons of infertility, mastitis, lameness, other disease or injury.

**Cull Cow** - A cow having been identified to be removed from the herd or having recently left.

**Dairy Cow** - A bovine intended to produce milk for human consumption.

**Dam** - Mother or female parent in a pedigree.

**Downer Cow** - A cow unable to arise due to disease (e.g. milk fever) or injury. Most often occurs after shortly calving.

**Dry Cow** - A cow that is not producing milk after it has completed a period of lactation. The dry period of a cow usually lasts for 50 to 60 days.

**Dry cow tube** - See intramammary antibiotic

**Environmental** - Derived from the animal's environment, bedding, housing, etc.

**Forage** - Feedstuffs composed primarily of the whole plant, including stems and leaves. Examples include grass silage, maize silage, hay.

**Foremilk** - First milk stripped by hand from the teat before the cluster is attached. Used to visually determine milk quality and to stimulate "milk letdown."

**Forequarters** - The two front quarters of a cow's udder. Also called the fore udder.

**Freshly calved Cow** - A cow that has recently given birth to a calf.

**Gestation** - period of pregnancy. Usually lasts for 280 to 285 days in the cow.

**Hay** - Dried grass consisting of the entire plant.

**Heifer** - A bovine female usually less than two to three years of age that has not yet had a calf. Young cows milking in their first lactation are often called **first-calf heifers**.

**Herd** - A group of animals (especially cattle), collectively considered as a unit.

**Herringbone Parlour** - A milking parlor in which cows stand side-by-side, angled towards the pit. This allows milking from the side of the udder.

**Hutch** - Individual housing for young calves. Often made of white fiberglass or polyvinyl.

**Intramammary antibiotic** – term used to describe antibiotic infusion directly into the udder to treat mastitis or as a prophylactic treatment at drying off. Current best practice limits use of antibiotics at drying off to those cows with **SCC** over 200,000 cells / ml.

**Intramuscular** - Injections given into the muscle.

**Lactation** - To secrete or produce milk. Period of milk production, the ideal for the dairy cow is 305 days.

**Liner** - A flexible lining in the ridged milking teat cup. Massaging the teat end and intermittently cutting vacuum at the teat end during milking.

**Loose Housing** – A large building that allow cows access to an open straw bedded area for lying down.

**Mastitis** - An inflammation of the mammary gland (or glands), usually caused by bacteria.

**Milk letdown** - The process where the cow lets milk down into her teat and glands cisterns for removal. The process involves release of **oxytocin** to contract alveoli in the udder. Oxytocin is released by udder stimulation, feeding, the sound of the milking parlour etc.

**Oxytocin** - A hormone that is important in milk letdown and causes the contraction of the uterus during calving.

**Paddocks** - Subdivision of a pasture/field designed to provide grazing for a short period followed by an appropriate rest period for regrowth of grass.

**Parallel Parlour**- A raised milking area or platform where the cow stands perpendicular to the operator and milking units are attached between the rear legs.

**Parlour** - The specialized area on the dairy farm where milking is performed. Parlours come in many types. Here are some examples:

- Herringbone
- Parallel, rapid exit
- Rotary
- tandem

**Pasture** - Grass, grown for feeding or grazing animals.

**Pedigree** – a record of the parentage of an animal, showing it to be pure-bred.

**Post-Milking Teat Dip** - A product applied after milking to protect the teat from contagious pathogens that may have come into contact with the teat during the milking process.

**Pre-Milking Teat Dip** - A product applied in preparation for milking to clean the teat and reduce the spread of mastitis and maintain healthy teats.

**Puberty** – the time at which the cow/bull reaches sexual maturity

**Rapid Exit parlour** - Panels or rails that raise to release all cows on one side of the milking parlour at once.

**Replacements Heifers** - Young cows often being raised to replace the cows currently in the herd.

**Robotic milker (AMS, Automated milking system)** - A completely automated system for milking cows that requires limited human contact.

**Rotary Parlour** - A raised, round rotating platform or carousel on which cows ride while being milked.

**Ruminant** - Animals that have four stomach compartments - rumen, reticulum, omasum and abomasum - through which food passes in digestion. These animals chew their cud or regurgitate partially digested food for further breakdown in the mouth. Ruminant animals include cattle, sheep, goats, deer and camels.

**Silage** - A feed prepared by chopping green forage (e.g. grass, maize, lucerne) and placing the material in a clamp to exclude air. The material then undergoes controlled anaerobic fermentation.

**Sire** - Father or male parent in a pedigree.

**Somatic cell count (SCC)** - A measurement of the number of **somatic cells** (mainly white blood cells) per milliliter of milk. High SCC indicates **sub-clinical** or **clinical** mastitis. A high SCC (>225,000 cells /ml) will attract a milk price penalty from the milk buyer.

**Somatic Cells** - Predominantly white blood cells (leukocytes) which enter the udder from the blood in response to an infection or injury.

**Sphincter** - A ring-shaped muscle that allows an opening to close tightly, such as the sphincter muscle in the lower end of a cow's teat.

**Straights** - feeds such as rapeseed meal, soyabean meal, brewer's grains, sugar beet pulp pellets.

**Streak canal (or teat canal)** - Small canal located in the end of each teat, through which the milk passes immediately prior to expulsion.

**Strip Cup** - A cup used to collect foremilk for inspection before the cluster is attached. Used to diagnose mastitis.

**Subclinical** - A disease condition without symptoms but often resulting in decreased production or impaired milk quality.

**Subcutaneous** - Under the skin.

**Swing-over Parlour** - Parlour characterized by having the milking units positioned in the middle of the parlour for use on cows on both sides.

**Tandem Parlour** - Parlour design where cows line up head to tail in individually opening stalls.

**Teat** - The appendage on the udder through which milk from the udder flows.

**Teat Dip** - Pre and Post-milking - Substance that kills bacteria and helps to seal the teat end to prevent entry of bacteria into the udder between milkings. May contain emollients to improve teat end condition for use in cold, winter conditions.

**Teat Sealant** - A product that forms a mechanical barrier in the teat end to protect the udder during the dry period. Generally used at dry-off after **intramammary antibiotic infusion**.

**Total Mixed Ration (TMR)** - Feed formulated to meet requirements of the cow in which all of the ingredients are blended together in a mixer wagon. The feed provides all of the cows nutrient requirements

**Transition Cow** - A cow that is from about 2 weeks before to 2 weeks expected calving date.

**Tubes** – colloquial term for **intramammary antibiotic** tubes.

**Udder** - The mammary glands of a cow. Sometimes referred to as a **bag**.

**Weaning** – Time when milk is removed from the diet of the calf. In the dairy bred calf this usually happens at 6 to 8 weeks of age.

**Withdrawal Time** - Time required after the last drug treatment to lower drug residues to acceptable levels. An amount of time required following use of a medication in an animal before milk or meat can be entered into the human food supply.